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DATE MAILED: 09/08/2004

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--------------------------|-----------------|----------------------|------------------------|-----------------|
| 09/765,782 | 01/19/2001 | Guido M. Campagna | (AC 055) ITT-446-B | 1375 |
| 5 | 7590 09/08/2004 | | EXAM | INER |
| Andrew R. Basile | | | HOOK, JAMES F | |
| YOUNG & BA | ASILE, P.C. | | | |
| Suite 624 | | | ART UNIT | PAPER NUMBER |
| 3001 West Big Beaver Rd. | | | 3752 | |
| Troy, MI 480 | 084-3107 | | D. TE MAN ED 00/00/000 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|--|--|--|--|--|
| Office A - 1' Occurred | 09/765,782 | CAMPAGNA ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | James F. Hook | 3752 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 28 Ag | oril 2004 and 25 May 2004. | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1,33,34,36-41 and 43-61 is/are pendir 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1,33,34,36-41 and 43-61 is/are rejected to. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner | | | | | | |
| 10) The drawing(s) filed on is/are: a) acce | · | | | | | |
| Applicant may not request that any objection to the c | | • • | | | | |
| Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Example 11. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of | have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National Stage | | | | |
| httschmant/e) | | | | | | |
| Attachment(s)) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da | | | | | |

DETAILED ACTION

Claim Objections

Claim 43 is objected to because of the following informalities: it is dependent upon canceled claim 32. Appropriate correction is required. It will be assumed that such is intended to be dependent upon claim 1 for the following rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 33, 34, 36-41, and 43-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over lorio (223) in view of Kitamura (354). The reference to lorio et al discloses the recited metal layer tube comprising a metal tube 52, a zinc layer 54 bonded to the metal tube, where the zinc layer can be zinc plating or other alloys of zinc, a surface treatment layer 56 of chromate or phosphate, a layer 58 that can be placed considered the first polymeric layer and can be formed of a nylon material, and second polymeric layer 60, where additional layers 62 can be provided if desired, where the thicknesses and materials claimed including the limitations of claims 37, 38 are disclosed in the reference, and included also in the teachings of the reference are the method to form it which includes extruding the plastic layers. The reference to lorio et al discloses all of the recited structure with the exception of including phenols, specifically

carbolic acid in the primer layer where the phenol is capable of being sprayed. The reference to Kitamura discloses the recited plastic coating composition used to coat metal plates 1 that can be formed into tube shapes comprising a zinc coating on the metal plate, a treating layer using phosphoric or chromic acids which is considered the equivalent of a chromate or phosphate treatment, a primer layer can be provided next, where the primer layer can contain phenols, including phenols having R groups which include H and OH groups, where carbolic acid is a known phenol and would merely be a choice of mechanical expedients to use carbolic acids, and where such is a sprayable (col. 5, lines 9-35) which would create a layer having a thickness obtained by spray coating, and where such a primer provides a layer which adheres well to the metal layers and layers of polyamides to allow for better connection of the two. It would have been obvious to one skilled in the art provide a primer layer in lorio including sprayable phenols such as carbolic acid to give the primer layer better adhering properties for connecting polyamide layers to treated metal layers as suggested by Kitamura.

Claims 1, 34, 40, 41, and 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (354) in view of lorio (223). The patent to Kitamura discloses all of the recited structure with the exception of providing a plurality of polymeric layers to the treated metal plate formed into a pipe shape. The patent to lorio discloses all of the structure set forth above and it would have been obvious to one skilled in the art to modify the pipe in Kitamura by providing a plurality of polymeric layers to the outside of the treated metal pipe as such would provide further protection against corrosion as suggested by lorio.

Application/Control Number: 09/765,782

Art Unit: 3752

Claims 33, 36-39, 43, and 51-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (354) in view of lorio (223) as applied to claims 1, 34, 40, 41, and 44-50 above, and further in view of Kobayashi. The patent to Kitamura as modified discloses all of the recited structure with the exception of setting forth a specific type of phenol to use for the primer layer. The patent to Kobayashi discloses the recited coated metal plate formed into a pipe shape comprising a metal plate treated with zinc, which can be chromic acid treated, and further provided with a phenol layer which can be formed from specific phenols such as carbolic acid to further enhance the adhesion of polyamide connecting layers to form the pipe shape. It would have been obvious to one skilled in the art to modify the phenols in Kitamura as modified to be carbolic acid as such are old and well known phenols used to enhance adhesion of a polyamide layer to the treated plate to form a pipe shape as suggested by Kobayashi.

Claims 1, 33, 34, 36-41, 43, and 44-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (354) in view of lorio (223) and Kobayashi. The patent to Kitamura as modified discloses all of the recited structure with the exception of setting forth a specific type of phenol to use for the primer layer. The patent to Kobayashi discloses the recited coated metal plate formed into a pipe shape comprising a metal plate treated with zinc, which can be chromic acid treated, and further provided with a phenol layer which can be formed from specific phenols such as carbolic acid to further enhance the adhesion of polyamide connecting layers to form the pipe shape. It would have been obvious to one skilled in the art to modify the phenols in Kitamura as modified to be carbolic acid as such are old and well known phenols used to enhance

adhesion of a polyamide layer to the treated plate to form a pipe shape as suggested by Kobayashi.

Response to Arguments

Applicant's arguments filed April 28, 2004 and May 25, 2004 have been fully considered but they are not persuasive. The arguments are directed toward the teachings of Kitamura, it is believed that the phenols used in Kitamura are similar to those set forth in applicant's specification and that the used of carbolic acid is merely an expedient. It is believed that similar structure exists in similar phenols and that the use of carbolic acid, a simpler phenol is an obvious mechanical expedient, where the R group is described as including H and OH, therefore it is not considered persuasive that the added language has overcome this reference yet. Teachings need to be set forth that provide evidence that such is not a mechanical expedient. Likewise column 5, lines 9-58 of Kitamura state that the phenol layer is sprayed and inherently that would been obtaining a thickness by spraying, with out any specific thickness claimed it is believed that Kitamura meets this new limitation also. It is considered that Kitamura teaches a spray coating method which is all that is required and any thickness achieved by the spray coating would appear to meet the current limitations. With respect to Kobayashi, in column 4, lines 16-34 teaches carbolic acid as an alternative phenol, therefore a rejection setting forth the teachings of Kobayashi to use carbolic acid which

meets the new limitations of claim 1 is also being made should such be proven not to be mechanical expedients.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Jahnke, Samour, Ikeno, Murase, Patil, and Aizawa disclosing state of the art coated metal substrates.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (703) 308-

2913. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

James F. Hook Primary Examiner Art Unit 3752

JFH